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wherein, R_{01} and R_{02} are each independently a hydrogen atom, a trimethylsilyl group, a triethylsilyl group, a t-butyldimethylsilyl group, an acetyl group, a methoxymethyl group or a tetrahydro-4H-pyran-2-yl group;

Z is represented by formula (1-5),

in the above formula (1-5),

 R_{51} expresses -CONR₅₁₁R₅₁₂, -COR₅₁₃ or -C(OH) R₅₁₄R₅₁₅, wherein R₅₁₁ and R₅₁₂ are identical to or different from each other, and they are a hydrogen atom or a C₁-C₄ alkyl group, or both the members together express a nitrogen-containing C₃-C₈ alkyl ring or a morpholino group in cooperation with the nitrogen atom to which they are bonded; and R₅₁₃, R₅₁₄ and R₅₁₅ are identical to or different from each other, and they express a C₁-C₄ alkyl group;

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 R_{52} expresses a methyl group, an ethyl group, a trifluoromethyl group or a pentafluoroethyl group.

A vitamin D_3 compound or a pharmaceutically permissible solvate thereof described in Claim 45, wherein, in the above formula (1), R_{01} and R_{02} are both hydrogen atoms.

3/7. (Amended) A vitamin D₃ compound or a pharmaceutically permissible solvate thereof described in Claim 45, wherein, in the above formula (1), R₅₁ is -CONR₅₁₁R₅₁₂ or -COR₅₁₃.

48. (Amended) A vitamin D_3 compound or a pharmaceutically permissible solvate thereof described in Claim 45, wherein, in the above formula (1), R_{51} is -CONR₅₁₁ R_{512} .

49. (Amended) A vitamin D_3 compound or a pharmaceutically permissible solvate thereof described in Claim 45, wherein, in the above formula (1), R_{51} is -COR₅₁₃.

(Amended) A vitamin D3 compound or a pharmaceutically permissible solvate thereof described in Claim 45, wherein, in the above formula (1), R_{51} is -CONR₅₁₁ R_{512} , and R_{511} and R_{512} are identical to or different from each other, and they are a methyl group or an ethyl group, or both the members together express an aziridine, pyrrolidine, piperidine or morpholino ring in cooperation with the nitrogen atom to which they are bonded.

51. (Amended) A vitamin D₃ compound or a pharmaceutically permissible solvate thereof described in Claim 45, wherein, in the above formula (1), R₅₁ is COR₅₁₃, and R₅₁₃ is a methyl group or an ethyl group.

A vitamin D_3 compound or a pharmaceutically permissible solvate thereof described in Claim 45, wherein, in the above formula (1), R_{52} is a methyl group.



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953. (Amended) A pharmaceutical composition comprising a vitamin D₃ compound or pharmaceutically permissible solvate thereof described in Claim 45, and a pharmaceutically permissible carrier.

Please add the following new claims:

(New) A method for treating an inflammatory respiratory disease comprising administering to a subject a therapeutically effective amount of a vitamin D₃ compound according to claim 45.

(New) A method for treating an inflammatory respiratory disease according to 1/6 claim 54, wherein the inflammatory respiratory disease is at least one inflammatory respiratory disease selected from the group consisting of acute upper airway infection, chronic sinusitis, allergic rhinitis, chronic lower airway infection, pulmonary emphysema, pneumonia, bronchial asthma, tuberculosis sequela, acute respiratory distress syndrome, cystic fibrosis and pulmonary fibrosis.

(New) A method of treating an inflammatory respiratory disease according to claim \$5, wherein the inflammatory respiratory disease is at least one acute upper airway infection selected from of the group consisting of common cold, acute pharyngitis, acute rhinitis, acute sinusitis, acute tonsillitis, acute epiglottis and acute bronchitis.

(New) A method of treating an inflammatory respiratory disease according to claim 56, wherein the inflammatory respiratory disease is at least one chronic lower airway infection selected from of the group consisting of chronic bronchitis, diffuse panbronchiolitis and bronchiectasis.

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14 58. (New) A method of treating a disease selected from the group consisting of malignant tumors, rheumatoid arthritis, osteoporosis, diabetes mellitus, hypertension, alopecia, acne, psoriasis, and dermatitis, comprising administering to a subject a therapeutically effective amount of a vitamin D₃ compound according to claim 451

(New) A method of treating hypercalcemia attributable to vitamin D excess, comprising administering to a subject a therapeutically effective amount of a vitamin D₃ compound according to claim 45.

/60. (New) A method of treating hypopararthyroidism, comprising administering to a subject a therapeutically effective amount of a vitamin D_3 compound according to claim 45.

(New) A method of treating a metabolic disorder of cartilage, comprising administering to a subject a therapeutically effective amount of a vitamin D_3 compound according to claim 45.

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